53. (Unamended) An image forming apparatus according to claim 51 further comprising output means for outputting an information concerning an abnormality information to an electronic apparatus having a display that can communicate with said apparatus.

54. (Unamended) An image forming apparatus according to claim 50, wherein said memory further memorizes abnormality information.

REMARKS

Summary

Amended independent Claims 1 and 13 recite at least one feature not disclosed or suggested by the patents to Bullock, et al. and Sakurai, et al. Therefore, are the outstanding rejections of these claims over these patents still proper?

Status of the claims

Claims 1-16 and 18-54 are pending. Claim 17 has been canceled without prejudice. Claims 1-4, 8-16, 18, 19, and 21 have been amended. Claims 22-54 have been withdrawn from further consideration. Claims 1, 13, 22, 30 38, 39, and 45 are independent.

Requested action

Applicants respectfully request the Examiner to reconsider and withdraw the outstanding objections and rejections in view of the foregoing amendment and the following remarks.

Title objection

The Examiner has objected to the title and requests a new title that is more clearly indicative of the invention to which the claims are directed. In response, while not conceding the propriety of the objection, a new title has been provided that is even more clearly indicative of the invention to which the claims are directed.

Rejections

Claims 1-3, 5, 9-17, and 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,835,817 (Bullock, et al.) Claims 4, 6-8, 19, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the patent to Bullock, et al. in view of U.S. Patent No. 5,923,917 (Sakurai, et al.).

Response to rejections

In response, while not conceding the propriety of the rejections, independent Claims 1 and 13 have been amended. Applicants submit that as amended, these claims are allowable for the following reasons.

Independent Claim 1 relates to an image forming apparatus comprising a developer container for containing developer, developer amount detecting means for detecting an amount of the developer contained the developer container, and a memory for storing information concerning the amount of the developer detected by the detecting means.

Claims 1 has been amended to recite control means for causing the detecting means to perform a detection operation for detecting the amount of the developer at a predetermined

timing, and for updating the information stored in the memory in accordance with a detection result of the detection operation.

Claim 1 also recites output means for outputting the information stored in the memory and concerning the amount of the developer.

In addition, Claim 1 has also been amended to recite that output means outputs the information concerning the developer stored in the memory until the detection result of the detecting means is confirmed and outputs the updated information after confirmation of the detection result.

In contrast, the patents to Bullock, et al. and Sakurai, et al. are not understood to disclose or suggest output means that outputs the information concerning the developer stored in the memory until the detection result of the detecting means is confirmed and outputs the updated information after confirmation of the detection result.

The failure of these references to disclose or suggest at least these features proves fatal to establishing a prima facie case of obviousness against amended Claim 1, since MPEP §2142, requires that:

> To establish a prima facie case of obviousness... the prior art reference (or references when combined) must teach or suggest all the claim limitations.

For this reason, amended Claim 1 is allowable over this art.

Independent Claim 13 relates to an image forming apparatus comprising a developer container for containing developer, developer amount detecting means for detecting an amount of the developer contained in the developer container, and a memory for storing information concerning a remaining developer amount detected by the detecting means.

Claims 13 has been amended to recite control means for updating the remaining developer amount information stored in the memory in accordance with a detection result of a detection operation of the detecting means.

Claims 13 also recites output means for outputting remaining developer amount information stored in the memory.

Claims 13 has also been amended to recite that the output means outputs the information indicating the lesser amount of the remaining developer amount information stored in the memory and the remaining developer amount information obtained from the detection result of the detecting means.
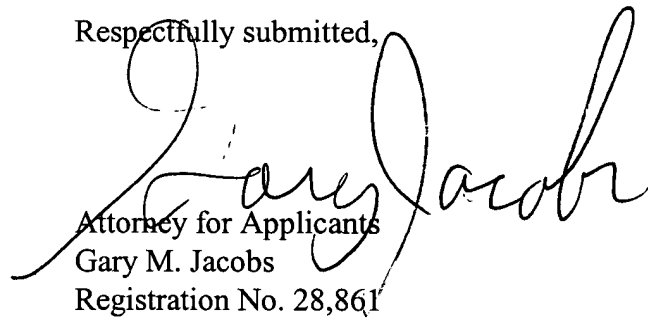
In contrast, the patents to Bullock, et al. and Sakurai, et al. are not understood to disclose or suggest output means that outputs the information indicating the lesser amount of the remaining developer amount information stored in the memory and the remaining developer amount information obtained from the detection result of the detecting means, as recited by amended Claim 13. Therefore, MPEP § 2142 mandates the allowance of amended Claim 13 over this art.

The dependent claims are allowable for the reasons given with respect to the independent claims and because they recite features which are patentable in their own right. Individual consideration of the dependent claims is respectfully solicited.

In view of the above amendments and remarks, the claims are now in allowable form. Therefore, early passage to issue is respectfully solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

Attorney for Applicants
Gary M. Jacobs
Registration No. 28,861

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile No.: (212) 218-2200

GMJ/lmj

DC_MAIN 87542v1

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Amended)   An image forming apparatus comprising:

a developer container for containing developer;

developer amount detecting means for detecting an amount of the

developer contained said developer container;

a memory for [memorizing an] <u>storing</u> information concerning the amount

of the developer detected by said detecting means; [and]

<u>control means for causing said detecting means to perform a detection operation</u>

<u>for detecting the amount of the developer at a predetermined timing, and for updating the</u>

<u>information stored in said memory in accordance with a detection result of the detection</u>

<u>operation; and</u>

output means for outputting the information <u>stored in said memory and</u>

concerning the amount of the developer,

wherein said output means outputs the information concerning the developer

[memorized] <u>stored</u> in said memory until the detection [results] <u>result</u> of said detecting means is

confirmed <u>and outputs the updated information after confirmation of the detection result</u>.

2. (Amended)　　　An image forming apparatus according to claim 1, wherein said output means outputs the information [memorized] <u>stored</u> in said memory <u>at the predetermined timing, which is a timing</u> immediately after <u>power from a</u> [the] power source of said apparatus is inputted <u>thereinto</u>.

3. (Amended)　　　An image forming apparatus according to claim 1, wherein at least said developer container is detachably attachable to said apparatus, and said output means outputs the information [memorized] <u>stored</u> in said memory <u>at the predetermined timing, which is a timing</u> immediately after said developer container is inserted in said apparatus.

4. (Amended)　　　An image forming apparatus according to claim 1, wherein said output means outputs the information [memorized] <u>stored</u> in said memory <u>at the predetermined timing, which is a timing</u> immediately after a door of an apparatus main body is closed.

8. (Amended)　　　An image forming apparatus according to claim 7 further comprising [a] comparing means for comparing [remained] <u>remaining</u> developer amount information [memorized] <u>stored</u> in said memory with [remained] <u>remaining</u> developer amount information to be detected by said detecting means, wherein said comparing means is provided in said video controller.

9. (Amended)   An image forming apparatus according to claim 1, wherein the information concerning a [remained] remaining developer amount is [a remained] remaining amount information.

10. (Amended)   An image forming apparatus according to claim 1, wherein the information concerning developer amount is [an] information indicating that a [remained] remaining developer amount is less than a predetermined amount.

11. (Amended)   An image forming apparatus according to claim 1, wherein the information concerning the developer amount is [an] information indicating that no developer remains.

12. (Amended)   An image forming apparatus according to claim 1, wherein the information concerning the developer amount is [an] information indicating that a remained developer amount is less than a predetermined amount and [an] information indicating that no developer remains.

13. (Amended)   An image forming apparatus comprising:

a developer container for containing developer;

developer amount detecting means for detecting an amount of the

developer contained in said developer container;

a memory for [memorizing] <u>storing information concerning</u> a [remained]

<u>remaining</u> developer amount detected by said detecting means[, remained amount information

memorized in the memory being serially updated]; [and]

<u>control means for updating the remaining developer amount information</u>

<u>stored in said memory in accordance with a detection result of a detection operation of said</u>

<u>detecting means; and</u>

output means for outputting [remained] <u>remaining</u> developer amount

information <u>stored in said memory,</u>

wherein said output means outputs <u>the information indicating the lesser</u>

<u>amount of the remaining developer amount information stored in said memory and the remaining</u>

<u>developer amount information obtained from the detection result of said detecting means</u> [either

a remained developer amount information memorized in said memory or a remained developer

amount information detected by said detecting means].

14. (Amended)   An image forming apparatus according to claim 13,

wherein said output means outputs the [remained] <u>remaining</u> amount information [memorized]

<u>stored</u> in said memory until a detection [results] <u>result</u> of said detecting means is confirmed.

15. (Amended)   An image forming apparatus according to claim 13, said

output means outputs the [remained] remaining amount information [memorized] stored in said

memory immediately after power from a [the] power source of said apparatus is inputted

thereinto.

16. (Amended)   An image forming apparatus according to claim 13,

wherein at least said developer container is detachably attachable to said apparatus, and said

output means outputs the [remained] remaining amount information [memorized] stored in said

memory immediately after said developer container is inserted in said apparatus.

18. (Amended)   An image forming apparatus according to claim 13 further

comprising a display, wherein the [remained] remaining amount information outputted from said

output means is indicated on said display.

19. (Amended)   An image forming apparatus according to claim 13,

wherein said apparatus can communicate with an electronic apparatus having a display, and said

output means outputs the [remained] remaining amount information to the electronic apparatus.

21. (Amended)   An image forming apparatus according to claim 20 further

comprising comparing means for comparing the [remained] remaining developer amount

information [memorized] <u>stored</u> in said memory with the [remained] <u>remaining</u> developer

amount information to be detected by said detecting means, wherein said comparing means is

provided in said video controller.